

IN THE CLAIMSRECEIVED
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Please amend the claims as follows:

1. (CURRENTLY AMENDED) A method for making a preoxidized active nickel material for a positive electrode of a hydrogen storage battery comprising the steps of:

reacting a first reactant comprising nickel with a second reactant in the presence of an oxidizing agent to form preoxidized active nickel material particles, wherein said first reactant does not comprise a hydroxide group.

2-28. (Cancelled)

29. (NEW) The method of claim 1, wherein the preoxidized active nickel material particles comprise NiOOH.

30. (NEW) The method of claim 1, wherein at least 1% of the preoxidized nickel material is oxidized.

31. (NEW) The method of claim 1, wherein between 3% and 70% of the preoxidized material is oxidized.

32. (NEW) The method of claim 1, wherein between 20% and 60% of the preoxidized material is oxidized.

33. (NEW) The method of claim 1, wherein the preoxidized material comprises Ni with a +3 state of charge.

34. (NEW) The method of claim 1, wherein said reacting step includes the steps of:

providing an active nickel material seed with a first degree of oxidation and growing a second active nickel material about the seed, the second active material about the seed having a second degree of oxidation.

36. (NEW) The method of claim 1, wherein the oxidizing agent comprises at least one of a chlorate, a perchlorate, a hypochlorate, a hypochlorite, a peroxide, a permanganates, or a nitrate.

37. (NEW) The method of claim 1, wherein the oxidizing agent comprises sodium hypochlorate.

38. (NEW) The method of claim 1, wherein said reacting step includes the steps of:

combining a metal ion solution, ammonium solution, a metal hydroxide and an oxidant in a reactor to precipitate the active nickel material particles.

39. (NEW) The method of claim 38 wherein the metal ion solution is a metal sulfate solution.

40. (NEW) The method of claim 38 wherein the metal ion solution includes one or more feed streams formulated to produce active nickel material with a base metal composition consisting essentially of Ni-Co, Ni-Co-Zn, Ni-Co-Zn-Mg, Ni-Co-Zn-Mg-Ca, and Ni-Co-Zn-Mg-Ca-Cu.

41. (NEW) The method of claim 1 wherein the active nickel material has a base metal composition consisting essentially of Ni-Co, Ni-Co-Zn, Ni-Co-Zn-Mg, Ni-Co-Zn-Mg-Ca, or Ni-Co-Zn-Mg-Ca-Cu.

42. (NEW) The method of claim 1 wherein the active nickel material particles comprise nickel hydroxide material and nickel oxyhydroxide material.

43. (NEW) The method of claim 1 wherein the active nickel material particles include particles that are substantially spherical.

44. (NEW) The method of claim 1 wherein said method produces preoxidized active nickel material with an apparent density of 1.4-1.7 g/cm³, a tap density of about 1.8-2.3 g/cm³ and an average size range of about 5-50 μ m.

45. (NEW) The method of claim 1 wherein the active nickel material is formed with cobalt hydroxide and cobalt oxyhydroxide.

46. (NEW) The method of claim 1 wherein the active nickel material is provided with a surface that is less than 98% oxidized.

47. (NEW) The method of claim 1 wherein the active nickel material is provided with a surface that is 5% to 75% non-oxidized and the remaining portion that is oxidized.

48. (NEW) A method for making preoxidized active nickel material for a positive battery electrode comprising the steps of:

providing a first reactant, said first reactant comprising nickel;

providing a second reactant, said second reactant lacking the capacity to oxidize said first reactant; and

effecting a reaction between said first reactant and said second reactant, said reaction producing said active nickel material;
wherein said reaction occurs in the presence of an oxidizing agent.

49. (NEW) The method of claim 48, wherein said first reactant is a nickel salt.

50. (NEW) The method of claim 20, wherein said first reactant is a liquid phase reactant.

51. (NEW) The method of claim 22, wherein said reaction is a precipitation reaction.

52. (NEW) The method of claim 23, further comprising the step of providing a base during said reaction, said base facilitating said precipitation reaction.

53. (NEW) The method of claim 20, wherein said second reactant is a base.

54. (NEW) The method of claim 20, wherein said second reactant forms a complex with the nickel of said first reactant.

55. (NEW) The method of claim 20, wherein said active nickel material comprises nickel in the +3 oxidation state.

56. (NEW) The method of claim 27, where said active nickel material further comprises nickel in the +2 oxidation state.

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